

Science Fair Outline

The National Oceanic and Atmospheric Administration (NOAA) was established in October 1970 with the goal of leading national oceanic and atmospheric research and development, as well as to provide a variety of scientific and technical services to other federal agencies, private sector interests and the general public. NOAA is an agency under the Department of Commerce and contributes to DOC's goal of stimulating economic development and productivity by providing reliable forecasts and warnings of changing environmental conditions such as severe weather. This helps protect life and property and enables industry to take appropriate actions.

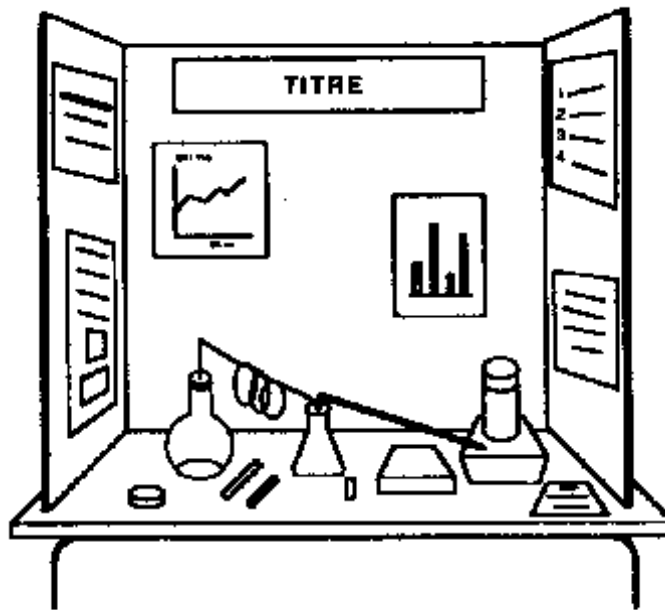
I. Rules

A. Students must have their application packets completely filled out by date.

This includes:

1. Hypothesis Form
2. Student Enrollment Form
 - a. Student Name
 - b. School Name and Address
 - c. Principal Name
 - d. Student Email/Phone Number
 - e. Advisor Name/Phone Number
3. Legal Responsibilities Form Signed by Advisor

- B. All science fair topics must abide by all state and federal laws and cannot adversely affect the environment, salmon or current studies.
- C. Students must have a formal write up which must:
1. Be in MLA format
 2. Document cited materials
- D. Projects must include/show evidence of all parts of the scientific method.
(see scientific methods attachment)
- E. Displays must be no larger than 122 cm. wide by 76 cm. deep by 274 cm. high from the floor and must be free standing.



II. Prizes

- A. All judging will take place separately at each school.
- B. Judges will be Orono Field Station Employees

1. If an employee has a relative at the school they are judging they will be disqualified and another judge will take over.
 2. Judges will use the scoring sheet provided (see attachment).
- C. Prizes will be given to the first, second and third place winners in each county.
- D. The project with the highest point value of all the counties will be the state winner. The same is true for second and third place.
1. County winner prizes are as follows:
 - a. First place will receive a \$100 US I Bond .
 - b. Second place will receive a \$75 US I Bond.
 - c. Third place will receive a \$50 US I Bond.
 2. State winners prizes are as follows:
 - a. First place will receive a \$300 I Bond..
 - b. Second place will receive a \$200 I Bond.
 - c. Third place will receive a \$100 I Bond
- E. In the chance of a tie the written documentation associated with the project will be submitted to the Director of Protected Resources Division or Dr. John Kocik for official ruling. This procedure will be followed on both the state and county level.

III. Please see the following websites for References

The National Oceanic and Atmospheric Administration

<http://www.noaa.gov>

The Scientific Method

(<http://school.discovery.com/sciencefaircentral/scifirstudio/handbook/scientificmethod.html>)

What makes a good science fair

http://www.usc.edu/CSSF/Resources/Good_Project.html

Project Checklist

<http://school.discovery.com/sciencefaircentral/scifirstudio/projectchecklist.html>

Science Fair Resource Guide

<http://www.ipl.org/div/kidspace/projectguide/>

USDA Science Fair Website

<http://www.ars.usda.gov/is/kids/fair/story.htm>

Science Fair Week By Week

<http://www.cccm.winnipeg.mb.ca/resources/tours/Marlene/sciencefair.html>

Timeline

<http://www.iit.edu/~smile/scifair.html>

Project Title: _____

Directions: Circle the number that best describes the project. The lowest score is zero and the highest score is three.

Evaluation Criteria

PROBLEM: To what degree is the problem new and/or different and how well is it written?

- (0) no problem statement
- (1) incomplete problem statement
- (2) complete problem statement, and well written
- (3) complete, well-written problem statement and a new idea for the student

HYPOTHESIS: To what degree is this a testable prediction?

- (0) no hypothesis
- (1) incomplete hypothesis
- (2) hypothesis present, but not completely testable
- (3) well-written, testable hypothesis

EXPERIMENTAL DESIGN: How well is the plan developed to validate the hypothesis?

- (0) lacks overall plan to validate or confirm the hypothesis
- (1) partial plan to validate or confirm the hypothesis
- (2) sufficient plan to validate or confirm the hypothesis
- (3) exemplary plan to validate or confirm the hypothesis

EXPERIMENTAL PROCEDURES: To what degree does the sequential experimental process connect the hypothesis, data, and results?

- (0) experimental procedures are not listed
- (1) experimental procedures are incomplete and/or not listed step by step
- (2) experimental procedures are complete and listed step-by-step
- (3) experimental procedures are quantitatively and/or qualitatively listed step by step

VARIABLES AND CONTROLS: How well are the variables identified and controlled?

- (0) no variables are identified or controlled
- (1) variables are identified but not controlled
- (2) variables identified and some variables are controlled
- (3) variables are carefully identified and controlled